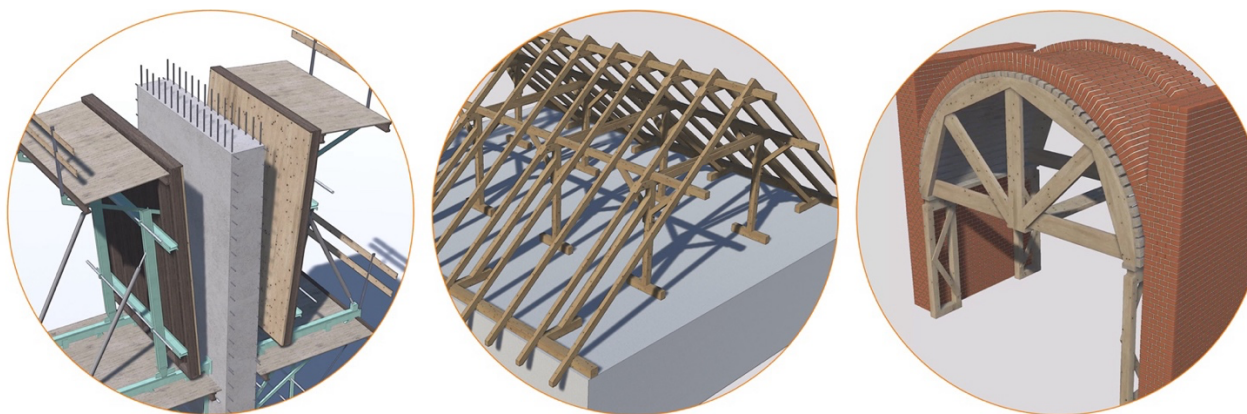


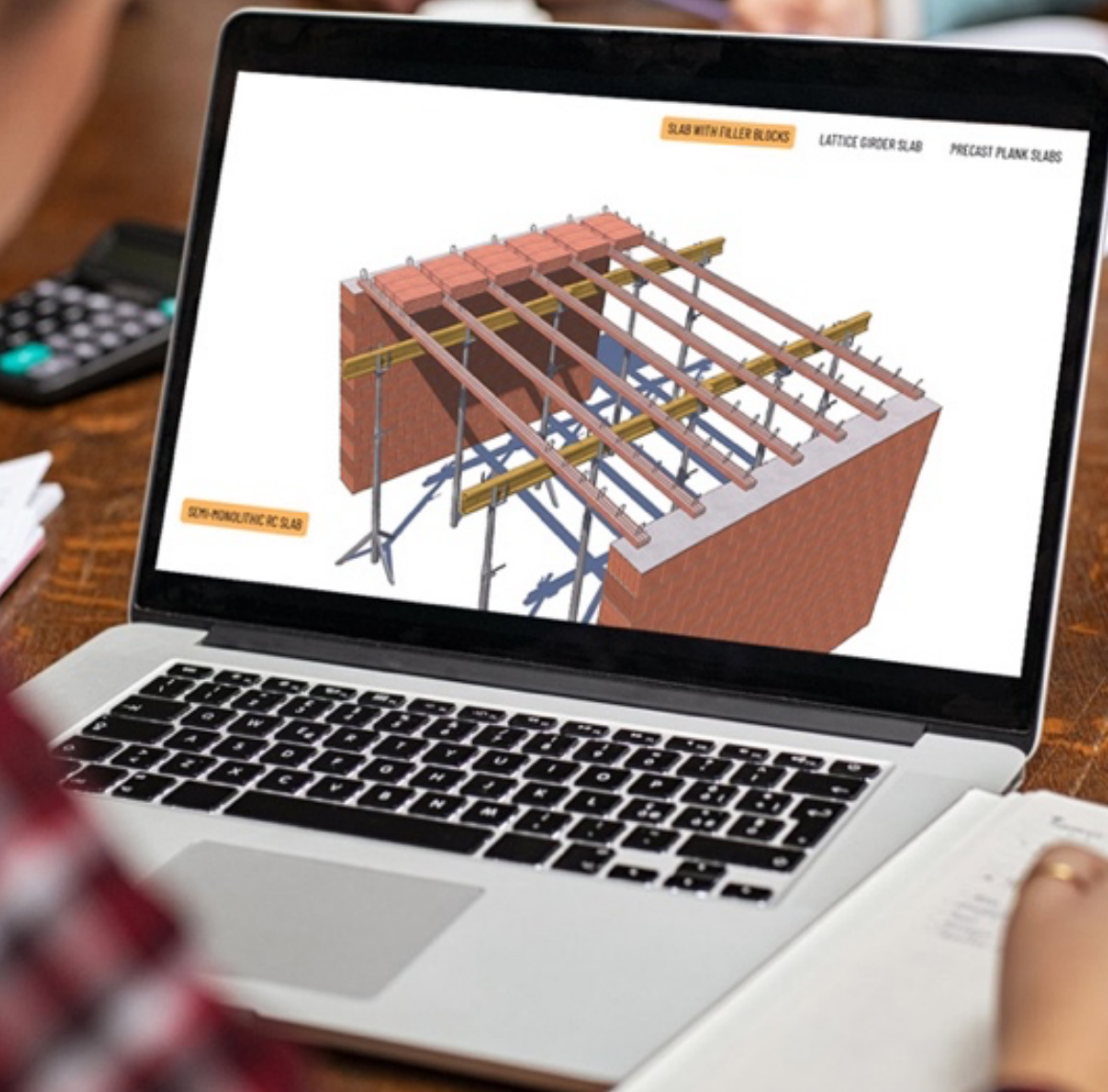
GUIDING ARCHITECTURAL LANGUAGE LEARNING: A PEDAGOGICAL HANDBOOK



Dr Julian Ng, Warnborough College
BuildingVids – Erasmus+ KA220 Strategic Partnership
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A NEW WAY TO LEARN CONCEPTS OF CONSTRUCTION & BUILDING

Introduction

The "Building Technology Animated for Language Learning" or **BuildingVids** project aims to revolutionise how construction and building technology are taught and learned.

It provides innovative resources for students and educators in these fields, as well as for language learners studying these subjects in English, Estonian, German, Hungarian and Spanish.

The core of these new learning materials consists of 3D animated videos. These videos visually demonstrate building processes, clearly summarising the fundamental principles of building construction.

Through narration, subtitles, and engaging animated content, the interactive videos will cover a broad spectrum of technical topics. This approach helps both teachers and learners develop essential communication skills relevant to architectural and civil engineering professions.

Furthermore, integrated quizzes and exercises will enable learners to practice and assess their understanding and skills acquired from the video materials.

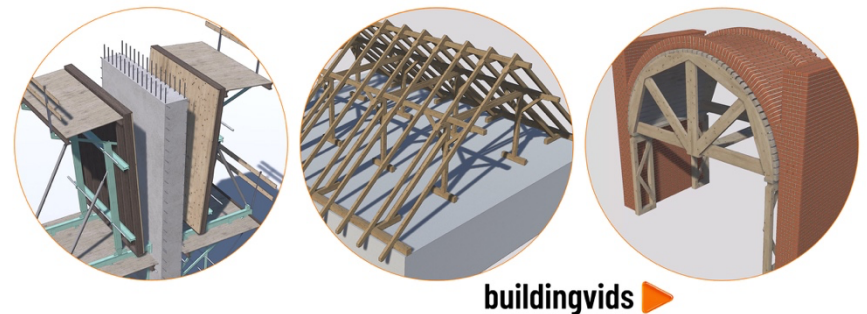
Why this Guidebook?

This book was created to guide teachers and trainers on how to incorporate the videos and quizzes into their everyday teaching to make learning more effective.

The interactive and modular nature of the materials lends easily to breaking down lessons into easily digestible chunks. This makes it easier for teachers to teach and for students to learn.

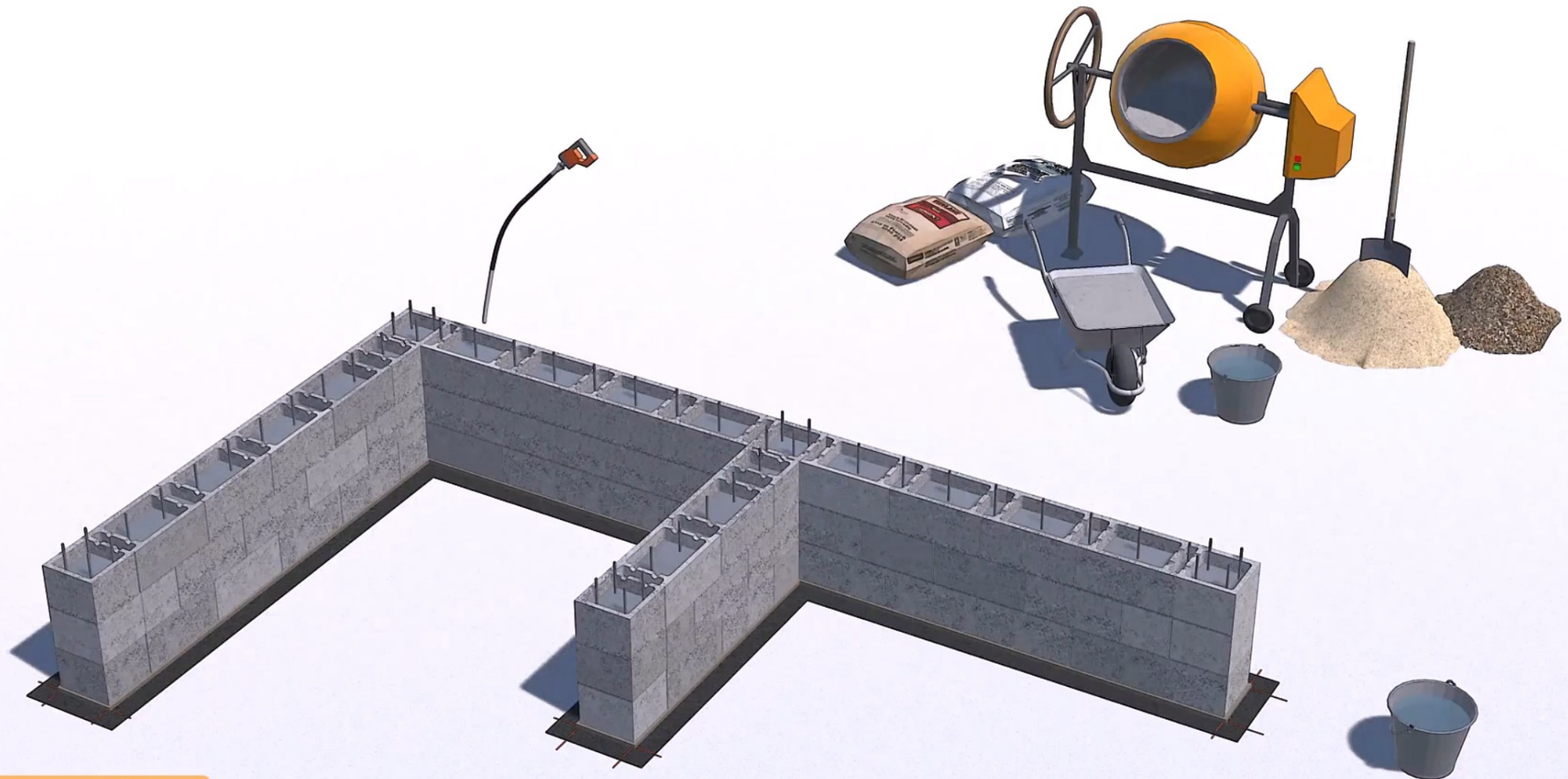
Accessibility is boosted through our use of the universal Moodle platform.

Furthermore, this allows us to integrate e-learning with traditional frameworks, simultaneously creating awareness and use of both systems.



MONOLITHIC WALL

SHUTTERING BLOCK WALL



CONSTRUCTION OF A WALL

1 : Understanding the Project and its Resources

1.1 Project Overview and Objectives

Good architecture begins with ideas, but it's on the building site where those ideas become real. It's crucial to have engineers and construction workers who understand the technology and can clearly explain their concepts.

The BuildingVids project provides up to 35 short videos (5-10 minutes) showing basic building technology. These videos also teach the correct architectural terms in five languages: English, Estonian, German, Hungarian, and Spanish.

The videos have narration and subtitles to help people improve their speaking and listening skills and become more fluent in the language they choose.

All the materials, including the videos and interactive exercises, are easy to find and use on an online platform (Moodle).

This project is for architecture students and their teachers, especially those who need to use architectural terms in another language.

Our teaching method considers that:

- The materials are available anytime in five languages for quick reference.
- Students already have some understanding of the topics in their own language.
- Language teachers help ensure that both technical knowledge and language skills are learned together.

1.2 Introduction to the E-Learning Material

The material is presented in several ways on www.buildingvids.com:

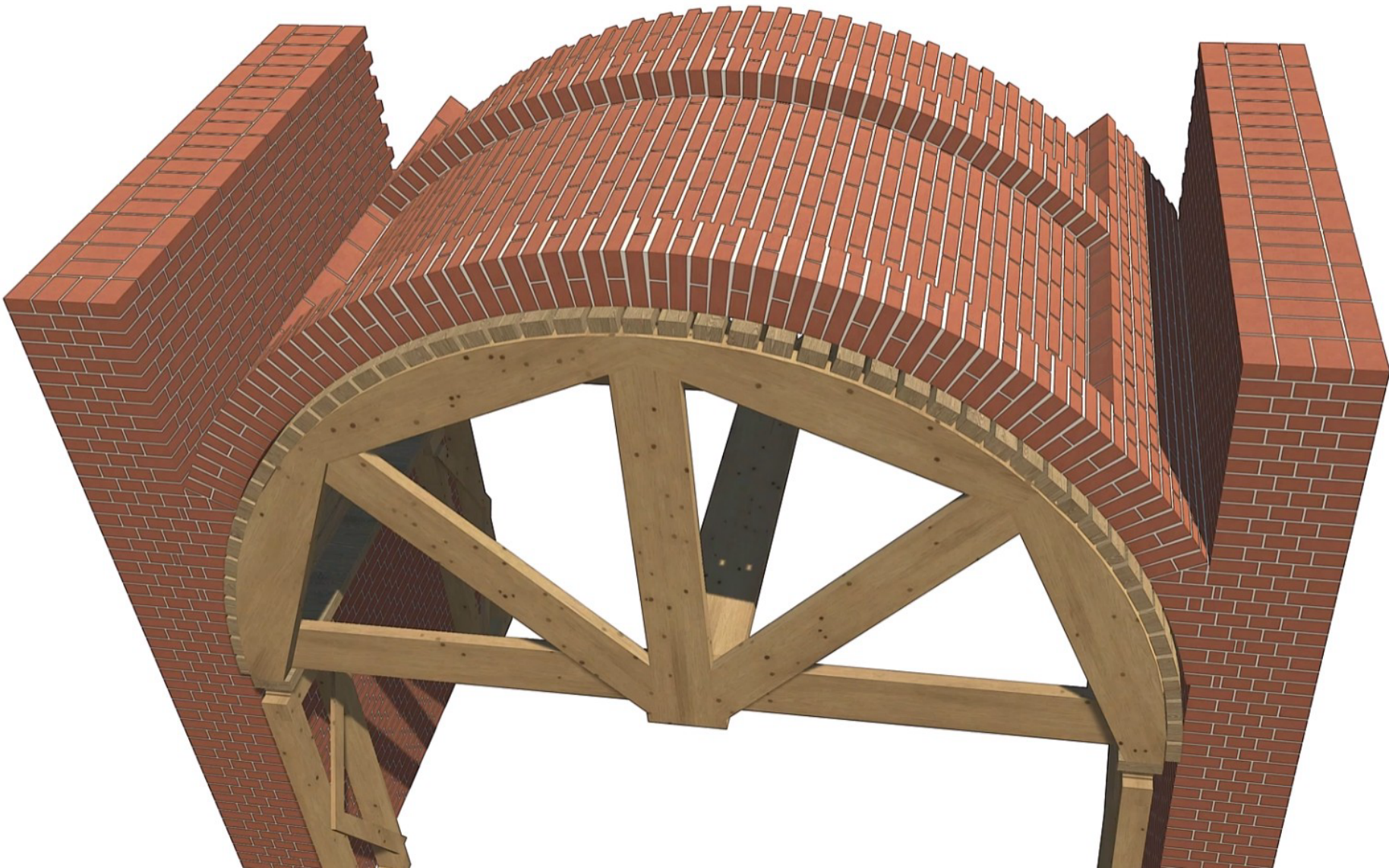
- a) 3 courses splitting information into clear instructional blocks
- b) 1 library of all the videos used in 5 languages
- c) 1 library of selected interactive quizzes in 5 languages

Materials are available in the 5 stated languages.

They provide brief summaries of the main processes involved in construction from earthworks onward. Detailed and beautifully-rendered graphics and videos illustrate each concept.

Note: These resources are **not** meant to replace textbooks or normal lessons, but to supplement the knowledge with concept terminology and videos. Therefore, they are ideal for integrating or being used in conjunction with normal lessons.





2 : Navigating the Moodle E-Learning Platform

2.1 Introduction to the BuildingVids Moodle

We use Moodle, a free and open-source Learning Management System (LMS) that is widely used by schools, universities and workplaces to create and manage online learning environments.

Moodle provides tools for educators to create personalised learning experiences, manage course content, and engage with students. In our case, we use Moodle mainly as a repository for content and to create interactive materials such as quizzes for learners.

Other features such as student tracking, and assessment and reporting functions are a bonus.

2.2 Getting Started: Accessing the Platform

The online language and construction technology learning materials of Buildingvids can be accessed without needing to register or login into an account. However, the useful features of Moodle - as listed above - can be exploited, especially in learning environments where the system is in everyday use. In such cases, the platform's exported course materials are freely accessible to any educational institutions and training providers who can provide access to these courses in the same costless form. The registered / logged-in solution is also available through the Buildingvids platform. Students can create their own profiles instantly, with the possibility to enrol in the courses. A Teacher profile can also be requested from the Buildingvids team. The BuildingVids team can make it possible to offer course clones with selected materials, features or limitations as required.

The screenshot displays the BuildingVids Moodle platform interface. At the top, the 'buildingvids' logo is on the left, and navigation links for 'EN', 'Courses', 'Buildingvids Project', 'Educational Handbook', 'Video Gallery', and 'Quiz Gallery' are on the right. A 'Log in' button is also present. Below the navigation bar, there are tabs for 'Home' and 'Participants'. The main content area features a large image of a yellow excavator with the number '316' on its arm. Overlaid on this image are two buttons: 'Visit the course' and 'Enrol the course'. Below the excavator image, there are three course cards. Each card has a small image of the excavator, a title, a description, a difficulty level (Basic, Expert), a user profile picture, and a 'Get access' button. The courses are: 'Course 1 - From Earthworks to Load-bearing Walls' (Basic), 'Course 2 - From Partition Walls to Stairs' (Expert), and 'Course 3 - From Openings to Claddings' (Expert). At the bottom of the page, there is a 'Visitor Counter' showing '4859' and the text 'Started at 20 May 2026'.

Please send your inquiries to info@ekegyesulet.hu to request an export of the courses or if you need a special course on the platform for your educational programme.

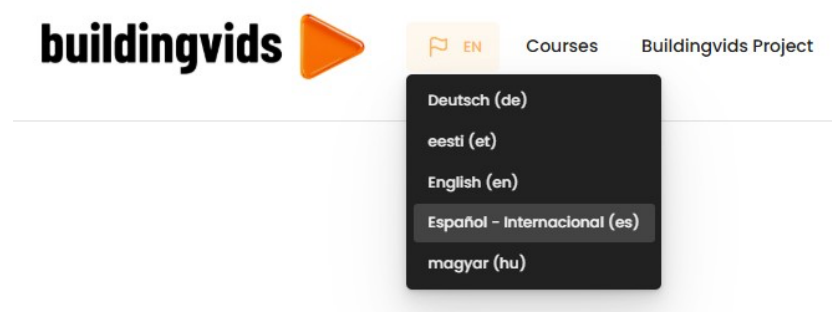
CREATING AN ACCOUNT AND LOGGING IN

Creating a new account and logging in is very simple. Registration requires the user to provide some compulsory information such as their first name, surname, and an email address along with a chosen username and password. A confirmation email will be sent to that email address with a link to and finalise the registration. By default, all users are registered in the role of 'Student', and from this point, they can enrol in any course with just a button click.

2.3 Understanding the Course Interface

LANGUAGE SELECTION

The button with a flag allows users to choose the language they want to use. A drop-down menu offers the choice of translating the complete e-learning platform into English, Hungarian, German, Spanish or Estonian (*see below*).



COURSES

The BuildingVids e-learning platform organises online training into 3 separate courses. Each course is easily accessible from the 'Courses' menu heading at the top of the site. The three courses comprise 13 modules, with 2 to 6 lessons in each - a total of 35 lessons. The course structure and the order of the modules follow the logic of construction, from bottom to top: the first course starts with earthworks, goes through foundations and waterproofing, and goes on to load-bearing walls. The second course continues with partition walls and horizontal spanning structures such as lintels and slabs/floors slabs/floors and closes with stairs and ramps. Finally, the third course covers roof trusses, different types of wall openings (doors and windows), and different coverings and claddings of roofs, floors and walls.

The number of units is designed to fit within a school year, with 34-36 lessons summarising construction works in a native or selected foreign language. The BuildingVids ethos is for learners to acquire useful vocabulary and communication skills in topics related to construction works.

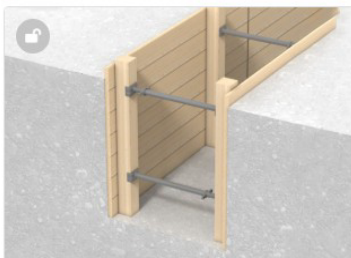


Collapse all

Course 1

4

[View all courses](#)

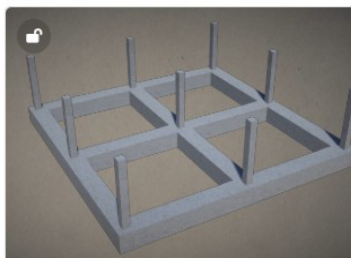


1.1 - Earthworks And Drainage - 1.1

Course 1



Get access

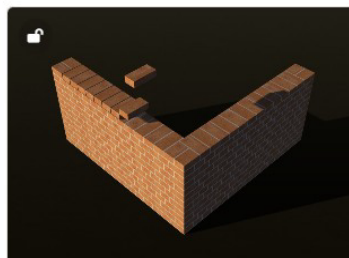


1.2 - Foundations - 1.2

Course 1



Get access

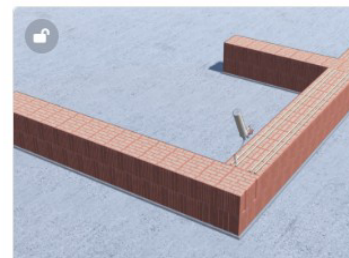


1.4 - Traditional Load-bearing Walls and Pillars - 1.4

Course 1



Get access



1.5 - Modern Load-bearing Walls and Pillars

Course 1



Get access



Course 2

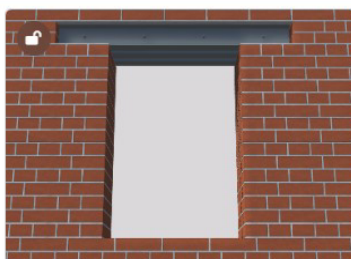
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[View all courses](#)



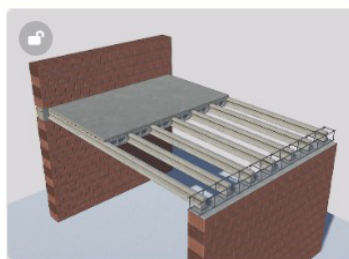
II.1. PARTITION WALLS

Course 2



2.2. - Arches & Lintels - 2.2

Course 2



2.3 - Vaults, Slabs, Floor & Ceiling Systems - 2.3

Course 2



2.4. - Stairs & Ramps - 2.4

Course 2

THE STRUCTURE OF THE COURSES

Each lesson follows a clear and simple structure that is easy to follow:

- A YouTube video with a playtime of 5-10 minutes: each video summarises a topic, with narrated animations showing building sequences. Subtitles provide additional understanding of the processes, methodologies and vocabulary.
- The full transcript is provided under the videos for review.
- Finally, understanding of the lesson is assessed through the following:

1 - Summary – 10 True & False questions to check comprehension of the methods and rationale behind technical decisions

2 - Question Set – 5 Multiple-Choice questions (4 choices each)

3 - Drag The Words - for learning the key terminology in context

4 - Crosswords - useful for building confidence in technical vocabulary

5 – Paragraph Ordering – consolidates knowledge of correct construction processes

6 - Speak The Word - practising pronunciation in the target language

Use the Search Courses function to find what you are looking for.
Once in a course, breadcrumbs allow quick access to each course module.

The screenshot shows the 'buildingvids' website interface. At the top, there's a navigation bar with 'buildingvids' logo, a language selector (EN), and links for 'Courses', 'Buildingvids Project', 'Educational Handbook', 'Video Gallery', and 'Quiz Gallery'. A 'Log in' button is on the right. Below the navigation bar, a breadcrumb trail reads 'UNIT 3 - TRADITIONAL WALLS & COLUMNS'. The main content area is titled 'Traditional Walls & Pillars - Pillars & Columns' and includes a sub-breadcrumb 'COURSE 1 / MODULE 4 - TRADITIONAL WALLS & PILLARS / UNIT 3 - PILLARS & COLUMNS'. A video player is embedded, showing a 3D animation of three brick pillars. The video title is 'C1-M4-L3 - Traditional Columns & Pillars'. Below the video player, there's a 'Watch on YouTube' button. The text below the video explains that pillars and columns are vertical load-bearing structures. It lists three types: 1. Wooden columns, 2. Stone pillars, columns, and 3. Masonry of brick pillars. At the bottom, there's a 'PRACTICES' section with three options: Practice 1, Practice 2, and Practice 3, each with a corresponding icon.

EXAMPLES OF ASSESSMENT

Drag the Words example:

PRACTICES: Practice 1 Practice 2 Practice 3 Practice 4

Drag the words into the correct boxes

In a prefabricated well foundation, the first step is placing the [] in the planned position of the base. Excavation of the [] starts within the cutting edge area.

The first reinforced concrete casing element is placed on top and sinks as [] continues.

Further casing elements are added until the planned [] is reached. The bottom of the shaft is sealed with a waterproof concrete layer called the []. The inside of the shaft is filled with lean concrete or []. Finally, a load-bearing [] made of reinforced concrete slab is constructed on top.

In a steel-cased shaft foundation, the steel [] wall is sunk before excavation begins.

Concreting starts in [] while the casing wall is continuously pulled out. Shaft bodies are typically connected by a [] footing.

grid

flushing

depth

bottom plug

sandy gravel

cutting edge

excavation

header

earth

slurry

waterproofing

stages

casing

Check

Crossword example:

PRACTICES: Practice 1 Practice 2 Practice 3 Practice 4

Across

1 A horizontal layer of blocks in a wall. (6)

5 A lightweight masonry material with very low density and good thermal insulation. (7,8)

6 A specific area in a wall (like a thick mortar joint) where heat escapes more quickly than through the surrounding block. (7,6)

8 A mixture of sand, water, and cement used to join bricks or blocks together in a wall. (6)

10 A string stretched between corner blocks used as a guide to keep the filler blocks straight and level. (7,4)

Down

2 A tool used to tap blocks into position without damage. (6,6)

3 The property that reduces heat transfer through walls. (7,10)

4 The horizontal distance by which masonry units in one course are staggered relative to the units in the course below to ensure structural stability. (6)

7 A protective layer fixed to the concrete slab under the first course to prevent moisture from rising into the wall. (3)

9 A tool used to mark long, straight lines on flat surfaces using a string and colored powder. (5,4)

Retry the task. Reset all responses and start the task over again.

2 / 10 Retry

Paragraph Ordering example:

PRACTICES: Practice 1 Practice 2 Practice 3 Practice 4

The phases of construction

Above the foundation, on the surface of the reinforced concrete slab, we mark the external and internal contours of the walls, the wall corners, the wall connections, and the openings with a chalk line.

✓ +1

A horizontal damp proof course in 1 layer of modified bituminous membrane will be installed.

✓ +1

In the case of flat ground blocks, the perfect levelness of the first mortar layer is crucial because the minimum thickness of the joints in the subsequent courses will no longer allow for correction. Adjustment is carried out using a mortar-levelling tool and a levelling bar. The base layer of mortar is 2 to 3 centimetres thick, on which the setting points must be marked again.

✓ +1

Next comes the positioning of the leads, which are adjusted with a rubber mallet and a level. We start with whole blocks at the wall ends, a 19-centimetre closer at the wall corners, and a 12-centimetre closer at the Tee connection.

✓ +1

Then comes the laying of the intermediate blocks for the first course of one of the 44-centimetre wall sections. To do this, a line is stretched out between the set leads. At the corner, we add a half bat to the three-quarter closer as planned and fill the space between the cut elements with adhesive. The same is also done in all other cases where cut blocks meet other blocks. The whole blocks are joined together by pushing the grooves and tongues into each other without using any adhesive.

✓ +1

The first course of the 38-centimetre wall section is also built, and the joints are filled with adhesive.

✗

The intermediate blocks of the other wall section are laid similarly.

✗

The second course also starts with the laying of the leads. We again start with a 19-centimetre closer in the wall -corners, but this time, the block faces the other way. At the Tee connection, we place a 19-centimetre-closer in the direction of connecting the 38-centimetre wall. At each wall end, a half closer is now placed over the whole block.

✓ +1

In all other respects, we will continue with the same masonry work as before. The level and the plumb are checked regularly with a level

✓ +1

7/9 [Retry](#)

Multiple-Choice Question example:

PRACTICES: Practice 1 Practice 2 Practice 3

What is the primary function of pillars and columns?

- Reduce wall thickness
- Decorate walls
- ✓ Support beams and slabs
- Insulate buildings

1/1 [Next](#)

⌂ ○ ○ ○ ○ ○

VIDEO AND QUIZ GALLERIES

The Video Gallery (accessed from the Header menu) lists all of the videos on the site, organised in a masonry grid of thumbnails, in 5 language groups.

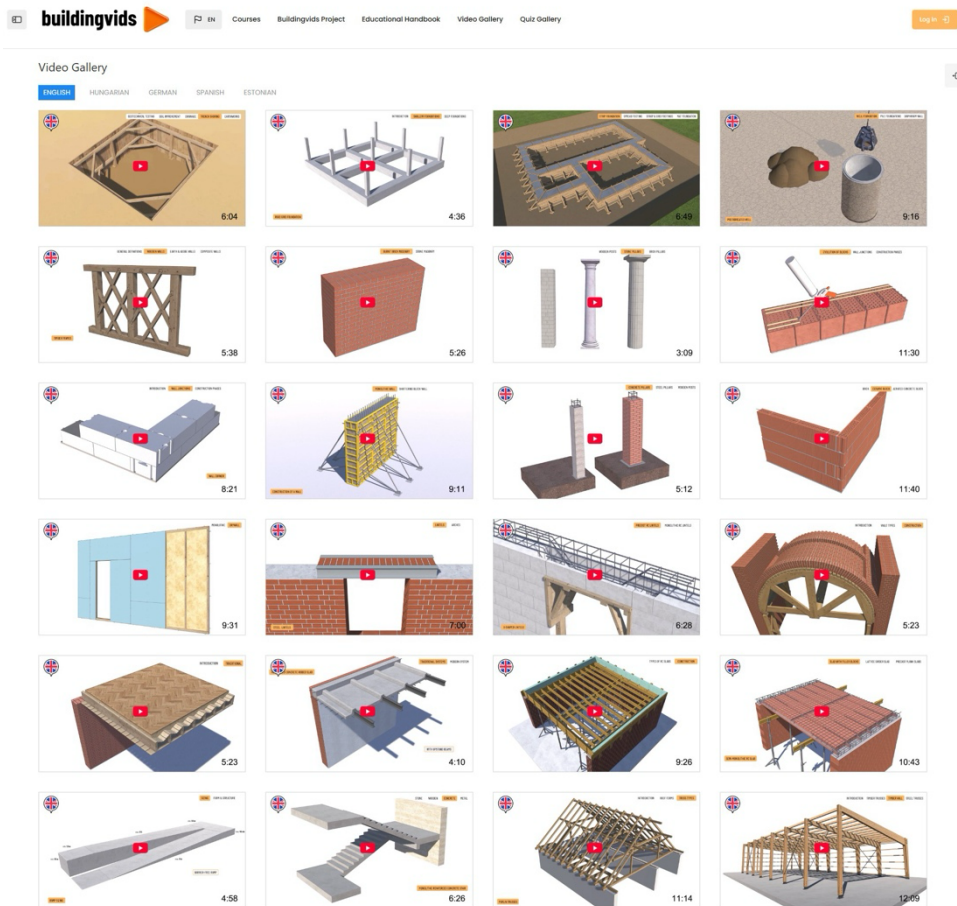
Likewise, the Quiz Gallery allows access to all assessments from every lesson, according to language.

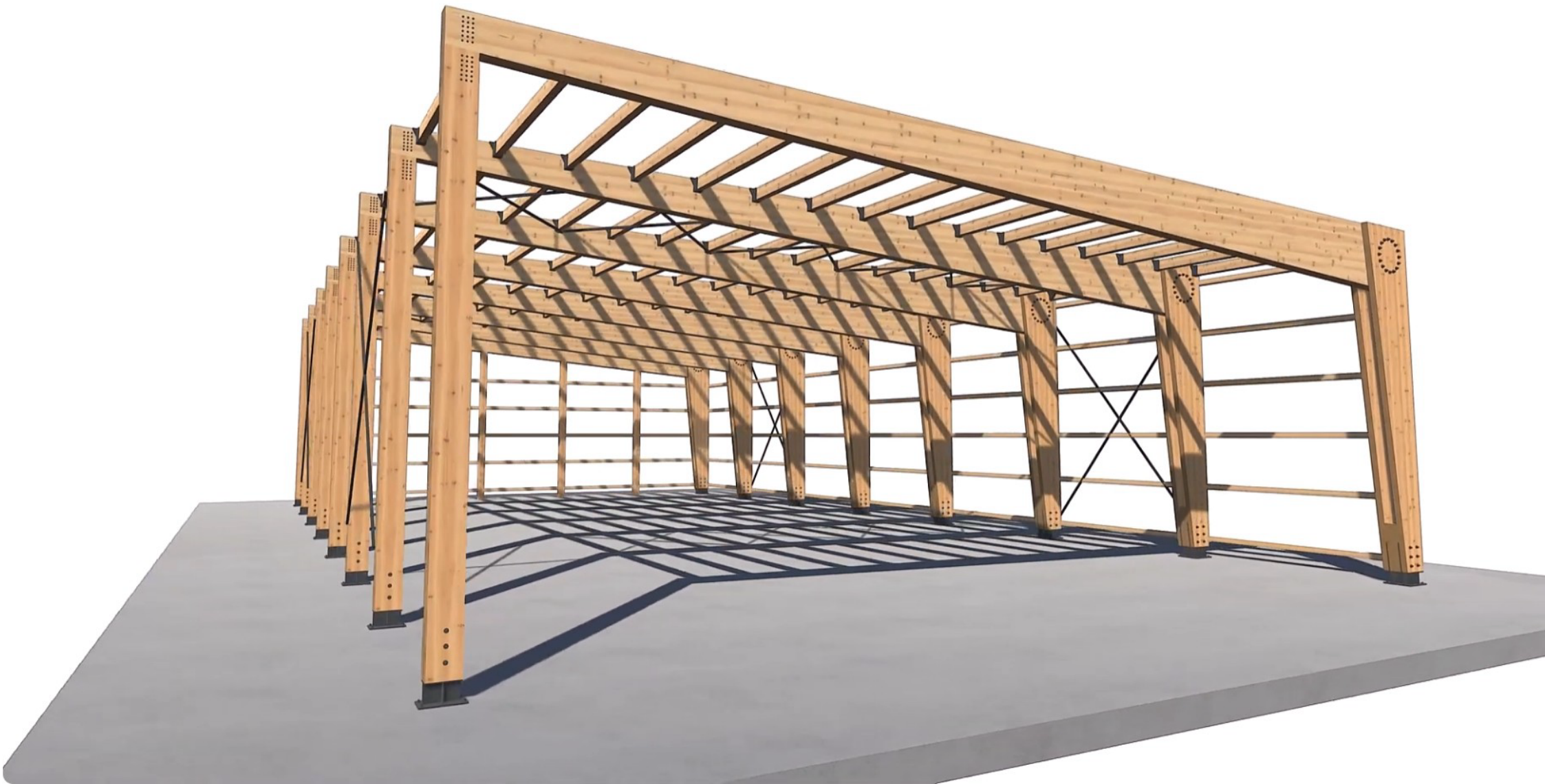
BUILDINGVIDS PROJECT

This button on the Header Menu gives readers a summary of the Erasmus+ BuildingVids project aims and results, as well as information on each of the project's partners.

EDUCATIONAL HANDBOOK

The PDF version of this Handbook is available to download in 5 languages.





3 : Integrating E-Learning Content into Traditional Educational Frameworks

3.1 What is Blended Learning?

Blended learning combines traditional face-to-face classroom teaching with online learning components. This approach integrates in-person instruction with digital resources to create a more flexible, personalised learning experience.

3.2 Benefits of BuildingVids for Architectural Language Education

Specialised Vocabulary Acquisition	Students can learn complex architectural terminology at their own pace through online modules
Visual Learning	Architecture is highly visual - digital tools can provide extensive visual examples without classroom time constraints
Practice Opportunities	Increases exposure to technical language through additional practice outside class time
Accessibility	Allows students to review difficult concepts multiple times
Real-World Application	Connects classroom learning with practical applications



3.3 Suggested Lesson Plan Template

Lesson Plans that integrate with e-learning materials should have a consistent structure.

Be mindful of the fact that a key aim of the BuildingVids resource is to develop proficiency in the use of architectural terminology and language. This is to give the participating learners mobility and transferability of their skills in different contexts and countries. You should be able to adapt these to different levels of classes by adding complexity, additional content, interactivity and problem-solving.

We are not prescriptive at BuildingVids, but here is a sample lesson plan:

Lesson Title:

Topic:

Target Language: (e.g., English, Estonian, Hungarian, German, Spanish)

Level: (e.g., Beginner, Intermediate, Advanced)

Learning Objectives: By the end of this lesson, students will be able to:

- (Specific, measurable, achievable, relevant, time-bound learning outcome related to architectural knowledge)
- (Specific, measurable, achievable, relevant, time-bound learning outcome related to the target language)
- (Optional: Further learning outcome related to skills development)

Materials:

- **E-learning (BuildingVids.com):**
 - Course content: (Specific title(s) of relevant BuildingVids online course(s))
 - Video(s): (Specific title(s) of relevant BuildingVids video(s))
 - Quiz(zes): (Specific title(s) of relevant BuildingVids quiz(zes))
 - Interactive Exercises: (Specific title(s) of relevant BuildingVids interactive exercises, if applicable)
- **Classroom:**
 - Handouts: (List any worksheets, diagrams, or text-based materials)
 - Visual Aids: (e.g., physical models, images, real-life examples)
 - Whiteboard or Projector
 - Markers or Pens

Activities:

- **Pre-E-learning (Classroom-Based):**
 - (Description of activities to introduce the topic, activate prior knowledge, and pre-teach key vocabulary in the target language. This could include brainstorming, discussions, vocabulary matching, short reading tasks, etc.)
- **During E-learning (Individual/Group Online Activity):**
 - (Instructions for students on how to engage with the BuildingVids materials. Specify which videos to watch, which sections to focus on, and when to complete quizzes or interactive exercises. Consider if this is done individually or in small groups.)
- **Post-E-learning (Classroom-Based):**
 - (Description of activities to consolidate learning, discuss the e-learning content, clarify any misunderstandings, and practice using the new architectural vocabulary and concepts in the target language. This could include discussions, Q&A, pair work, presentations, drawing exercises, problem-solving tasks, etc.)

Assessment:

- (How will student learning be assessed? This could include observation of participation in discussions, completion of BuildingVids quizzes, analysis of completed worksheets, presentations, or other tasks.)

Duration: (Estimated time for each stage of the lesson)

- Pre-E-learning:
- During E-learning:
- Post-E-learning:
- **Total:**

Language Focus: (Specific language skills and vocabulary emphasized in this lesson)

- **Vocabulary:** (List key architectural terms in the target language)
- **Grammar/Structures:** (Highlight any specific grammatical points or sentence structures relevant to the topic)
- **Pronunciation:** (Note any challenging pronunciations)
- **Communication Skills:** (e.g., explaining processes, describing components, asking clarifying questions)

3.4 Sample Lesson Plan

This sample lesson plan demonstrates how you can integrate the BuildingVids e-learning materials into a traditional classroom setting to teach architectural concepts while focusing on English language acquisition. Remember to adapt the content and activities based on the specific level and needs of your students.

Sample Lesson Plan: Basic Concepts of Foundations

Lesson Title: Understanding Foundations

Topic: Basic Concepts of Foundations: Purpose and Types

Target Language: English

Level: Beginner to Intermediate

Learning Objectives: By the end of this lesson, students will be able to:

- Explain the primary purpose of a building's foundation in simple English.
- Identify and name at least two basic types of foundations in English.
- Understand the importance of soil conditions for foundation design in basic English.

Materials:

- **E-learning (BuildingVids):**
 - **Course:** 1.2 Foundations
 - **Video:** "Unit 2 – Foundations. Part 1 – Basic Concepts"
 - **Quiz:** "Foundations – Basic Quiz"
- **Classroom:**
 - **Handout:** Worksheet with diagrams of different foundation types (e.g., shallow, deep) and key terms with missing definitions.
 - **Visual Aids:** Real-life images or models showing different types of foundations (e.g., a house under construction showing the concrete slab, pictures of piles). Soil samples (if available).
 - **Whiteboard or Projector**
 - **Markers or Pens**

Activities:

- **Pre-E-learning (Classroom-Based - 15 minutes):**
 - **Introduction (5 mins):** Teacher asks students in their native language why a building needs to be built on something solid. Leads a brief discussion about the ground and its properties.
 - **Vocabulary Pre-teaching (10 mins):** Teacher introduces key English vocabulary related to foundations (e.g., foundation, ground, support, weight, load, soil, stable, strong, shallow, deep). Uses visuals and simple explanations. Students repeat the words.
- **During E-learning (Individual Online Activity - 25 minutes):**
 - **Video Viewing (4 mins):** Students individually watch the BuildingVids video "Unit 2 – Foundations. Part 1 – Basic Concepts". They focus on understanding the reasons for a foundation and what to consider when building one.

3.5 Sample Flipped Classroom Lesson

This flipped classroom design allows students to process information **at home at their own pace**, then use class time for safe, **supportive practice** where making mistakes is encouraged and communication is valued over perfection. The lesson topic is the same as in 3.3.

Sample Flipped Classroom Lesson Plan: Understanding Foundations

Topic: Basic Concepts of Foundations: Purpose and Types

Level: Beginner to Intermediate (non-confident English speakers)

Learning Objectives: By the end of this lesson, students will be able to:

- Explain the primary purpose of a building's foundation in simple English.
- Identify and name at least two basic types of foundations in English.
- Understand the importance of soil conditions for foundation design in basic English.

Phase One: At Home Before Class

Activity 1

- **Materials**
 - o **Simple digital worksheet/PDF:** Shows 3 photos of a) a building standing strong; b) a building leaning or damaged; c) the ground/soil
- **Activities**
 - o Students look at the photos.
 - o Think about (students can write in their own language):
 - Why does a building need something under it?
 - What happens if the ground is not good?
- **Purpose:** Activates prior knowledge in a low-pressure way; connects to real life.

Activity 2

- **Materials**
 - o **Visual vocabulary guide** (PDF with images)
 - o (Optional) Audio pronunciation files

- **Key Vocabulary**

foundation, ground, support, weight, load, soil, stable, strong, shallow, deep, slab, footing, pile, distribute, prevent, settle

- **Student Tasks**

- Look at the pictures and words together
- Listen to pronunciation (if available)
- Try saying the words quietly to yourself

- **Purpose:** Familiarisation of the keywords. "Don't worry about remembering all these words now. We'll practice together in class. Just look and listen."

Activity 3: First Video Viewing

- **Materials:**

- BuildingVids video – "Unit 2 – Foundations. Part 1 – Basic Concepts"

- **Student Tasks:**

- Watch the video once and listen – don't take notes yet
- Focus on: Why do we need foundations? What types do you see?
- Read BuildingVids course notes (1.2 Foundations) - use a dictionary if needed
- Underline or highlight words you find difficult
- Guiding Questions while reading:
 - What is the main job of a foundation?
 - How many types of foundations are mentioned?

Activity 4: Second Video Viewing

- **Materials:**

- BuildingVids video – "Unit 2 – Foundations. Part 1 – Basic Concepts"
- Prepared Worksheet
- Short Quiz to test comprehension of video and course notes

- **Student Tasks:**
 - o Watch the video again and complete a worksheet based on the video
 - o Students tick the words or functions that they hear as the video progresses
 - o E.g. “The purpose of a foundation is to” (tick the correct option)
 - o Complete a quiz (IMPORTANT: this is for learning, not for grading)

Activity 5: Pre-Class Reflection

- **Materials:**
 - o Quick online form or paper checklist
- **Complete before class:**

How I Feel Check-in

I watched the video: ☐ Yes ☐ Partially ☐ No

I read the notes: ☐ Yes ☐ Partially ☐ No

I completed the quiz: ☐ Yes ☐ No

Confidence level: 😞 Not confident → 😐 A little confident → 😊 Confident

One thing I learned: _____

One thing I'm confused about: _____

- **Teacher Action: Review these reflections BEFORE class to see what students struggled with!**

Phase Two: In the Classroom

Activity 1

- **Materials:**
 - Whiteboard and pens / blackboard with chalk
- **Student Tasks:**
 - Teacher forms class into groups of 4 (put at least one student who has good language proficiency in each group) to resolve an issue: a landlord has commissioned each group to construct something on his farmland which is located by a large lake.
 - The proficient student is to act as the group organiser who organises thoughts and ideas, provides some suggestions, etc. but is not allowed to speak on behalf of the group
 - A square representing a plot of land is drawn on the board. What does each group have to do to prepare the land for construction?
 - Each group must write their answers down as a series of 5 main steps in English. They are allowed as many sub-steps as they want as long these are written in English. Discussion within the group is allowed in English.
 - Focus on: The key steps to preparing the land for construction, rather than on the accuracy of the language used.
 - Each person will be allocated 2 points for full engagement with the target language; 1 point for some engagement, and 0 for little/no engagement.
 - The cumulative points will determine the group winner for this round.
 - Finally, each person in the group must take turns to explain each step. Points will be allocated for the correct steps offered by each group, with ½ point for each correct sub-step.
 - These points will be combined with the language engagement points to determine the overall group winner.

Activity 2: Which Foundation?

- **Materials:**
 - Handout/Projection of 5 Different Building Scenarios:
 - Small house on hard ground
 - Tall apartment building on soft soil
 - Bridge over a river
 - Small garden shed
 - Lighthouse on rocky coast

- **Student Tasks**

- Students work in pairs to discuss:
 - What type of foundation? (shallow or deep? which specific type?)
 - Why?
- Each pair volunteers their thinking. Other pairs vote with thumbs up/down.
- Teacher reveals 'expert answer' and explains why
- Focus is on communication, not grammar

Closing Activity: Language Practice & Reflection

Activity 1: Exit Ticket Reflection

Students complete individually:

My Learning Today

New words I can use now: (write at least 2) _____ , _____

One type of foundation I can name and explain:

Something I did well in English today:

Something I want to practice more:

My English confidence today: Start of class: 😞 😐 😊 End of class: 😞 😐 😊

Teacher's Closing

- Celebrate the class's effort using English: "Today you all spoke English, worked together, and explained building concepts! That's amazing progress!"
- Remind them: "Making mistakes is how we learn. You were all great!"

ASSESSMENT (Formative, Low-Pressure)

At Home:

- Quiz completion on Moodle (for learning, not grading)
- Reflection form submission (shows engagement)

In Class:

- Observation during group work (participation, effort to use English)
- Worksheet completion (vocabulary and concept understanding)
- Exit ticket (self-assessment and reflection)

Success Indicators:

- ✓ Student attempts to use target vocabulary
- ✓ Student participates in pair/group activities
- ✓ Student shows understanding through matching/sorting tasks
- ✓ Student confidence increases from start to end of class
- ✓ Student can identify at least 2 foundation types
- ✓ Student can explain basic purpose of foundations in simple English

NOT Assessed:

- X Perfect grammar
- X Native-like pronunciation
- X Individual oral presentations

3.6 Blended Teaching and Learning Strategies and Techniques

Teachers can use the BuildingVids e-learning materials effectively with traditional classroom instruction with a little bit of forethought. The goal is to create a ***dynamic and engaging learning environment*** that enhances both architectural knowledge and the target language acquisition.

3.6.1 Pre-E-Learning Activities: Preparing for Effective Learning

1 Activating Prior Knowledge

Before assigning content from BuildingVids (e.g. a video), initiate classroom discussions to tap into students' existing understanding of the topic in their native language. This helps create a cognitive link and makes the new information more accessible. For example, if the video is about "Partition Walls," ask students what they already know about partitions or have seen it being used.

2 Introducing Key Vocabulary

Pre-teach essential architectural and technical terms in the target language that will appear in the BuildingVids course content or videos. Use visual aids (pictures, real objects), simple definitions, and pronunciation practice. This reduces cognitive overload during video viewing and improves comprehension. For instance, before a video on "bricklaying," introduce words like "mortar," "level," "course," and "joint."

3 Read and Watch with a Purpose

Provide students with specific tasks or questions to focus on while reading or watching the video. This encourages active engagement and helps them identify key information. For example, "Watch the video and note down the three main steps in the bricklaying process" or "Identify five tools used in concrete mixing".

4 Focus on Language

Integrate short language-focused activities related to the video's content. This could involve matching terms with their definitions, gap-fill exercises using key vocabulary, or simple sentence construction related to the topic.



3.6.2 During E-Learning Activities: Promote Active Engagement

1 Guided Note-Taking

Provide students with structured note-taking templates or worksheets to fill in while watching the video. This helps them organise information and focus on key aspects. The template could include sections for vocabulary, steps in a process, materials used, or functions of components.

2 "Think-Pair-Share" Prompts

Pause the video at strategic points to ask short questions related to what they have just seen. Encourage students to first think individually, then discuss with a partner, and finally share their ideas with the whole class. This promotes active processing and peer learning.

3 Language Identification

Ask students to specifically listen for and note down instances of particular grammar structures or vocabulary being used in context within the video's narration or subtitles.

4 Visual Analysis

Encourage students to observe the visual elements of the animation to relate them to the subtitles and narration. Ask questions like "How does the video help you to understand this step?" or "What can you observe about the function of this component?"

Foundations - Shallow Foundations

COURSE 1 / MODULE 2 - FOUNDATIONS / UNIT 2 - SHALLOW FOUNDATIONS



Strip Foundation

The strip footing is the most common foundation for masonry structures, and is wider than the masonry above it. It is typically made of concrete or floating concrete, poured between the foundation trench walls. If the soil is not of sufficient strength, formwork is required for its construction. If structural reinforcement is required, scaled reinforcement is also placed in the concrete.

The implementation process is as follows:

1. Site clearing to remove plants and humus, the top layer of soil.
2. The batter boards are installed, fixing all the corner points and the boundary lines, which can be marked out on the surface of the soil, for example with lime powder.

Mat Foundation

A mat foundation is particularly needed in poor bearing soils, but most of all in high groundwater. The mat foundation resists the water pressure through its weight and its uniform design, which provides protection against flotation.

Construction of the mat foundation:

- After site clearing and setting out, drainage follows.
- After the excavation work make a min. 10 cm thick insulation protector concrete substrate, on which the waterproofing layers are laid. The substrate is wider than the mat in all directions and is provided with a perimeter beam to receive the insulation retaining wall, which can be built from small bricks, for example.
- Complete the ground waterproofing around the entire mat foundation.
- Lay 5 cm of **blinding concrete**, and follow with any necessary formwork and ironwork.
- Complete the concreting, preferably in one session.
- Finally, the earth is backfilled.

PRACTICES: Practice 1 Practice 2 Practice 3

What layer is applied under the mat foundation for insulation and waterproofing?

Push to speak

3.6.3 Post-E-Learning Activities: Consolidating Knowledge and Language Skills

1 Comprehension Checks and Discussion

Facilitate a classroom discussion in the target language to check understanding of the video's content. Encourage students to ask questions and clarify any doubts.

2 Vocabulary and Terminology Reinforcement

Engage students in activities that reinforce the newly learned vocabulary. This could include crosswords, word searches, labelling diagrams, creating flashcards, or playing vocabulary-based games.

3 Process Description and Explanation

Ask students to describe the building processes shown in the video in their own words using the target language. Encourage them to use the correct architectural terminology. This can be done individually, in pairs, or as a group presentation.

4 Practical and Applied Tasks

Connect the e-learning content to real-world scenarios or practical exercises. This could involve drawing diagrams, designing simple structures, or discussing how the concepts learned are applied on a construction site.

5 Language Production Activities

Encourage students to use the target language in communicative tasks related to the video content. This could involve role-playing scenarios (e.g., explaining a construction process to a client), preparing short presentations, or writing brief reports.

6 Integration with Interactive Exercises and Quizzes

Use the BuildingVids interactive exercises and quizzes as a follow-up activity to reinforce learning and assess comprehension. Discuss the results as a class and address any common errors.

7 Extension and Other Activities

Provide opportunities for further exploration of the topic through additional research, reading materials in the target language, or watching supplementary videos.

3.7 Assessment Strategies in a Blended Learning Environment

To effectively assess blended learning outcomes, teachers should think carefully about how to integrate both online and offline activities. Our goal is to create a holistic view of student understanding and skills and to leverage the strengths of each modality.

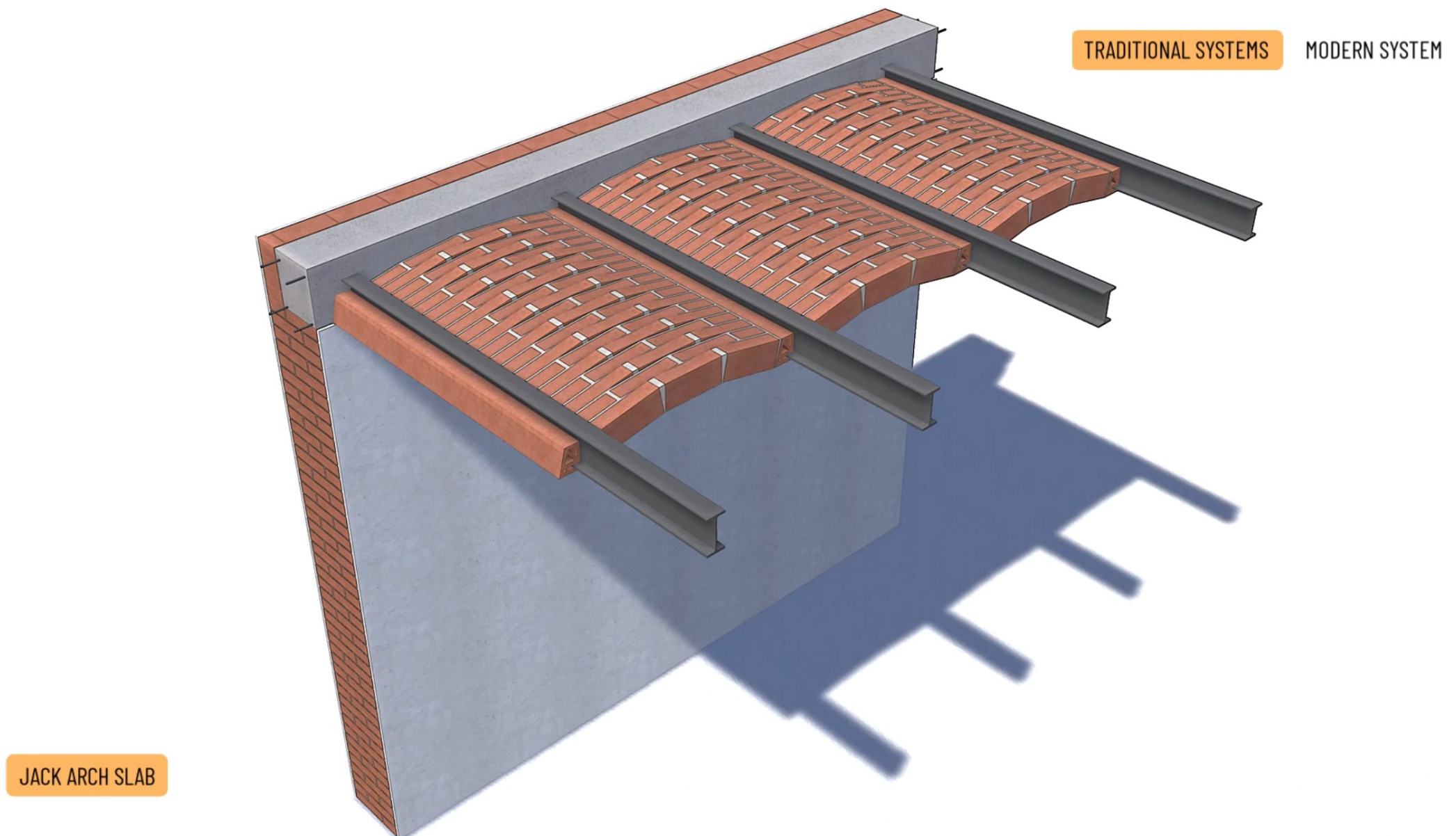
3.7.1. Ideas for Assessing Learning Outcomes (Integrating Online and Offline Activities)

Pre-Assessment (Online/Blended)

- a) Check/Teach vocabulary for the lesson
 - Discuss in native language, link to target language
 - Aim: familiarisation with terminology, linking it with process
- b) Alternative: provide a list of key words in target language
 - Get students to discuss what they mean in their native language
 - Aim: test for prior knowledge/gaps, allows tailoring of lesson
- c) Visual Association
 - Use Archidict, for example
- d) Concept Mapping (Elementary - Intermediate)
 - Use a key concept e.g. 'Foundations' – sts to brainstorm what this means, and to try and use the target language to explain
- e) Anticipation Questions
 - E.g. "What do we need to know to build a house in an area which snows heavily?"
- f) Online quizzes or surveys
 - Gauge prior knowledge and identify learning gaps. *Example:* Use a low-stakes or gradeless BuildingVids quiz to assess initial understanding.

Formative Assessment (Ongoing - Blended):

- Online Discussions (Moodle Forums): Pose open-ended questions or scenarios related to the learning material. Assess students' ability to articulate their understanding, engage with peers' ideas, and critically analyze concepts. *Example:* Present a case study and ask students to discuss potential solutions and justify their reasoning in a Moodle forum.
- Online Quizzes (Moodle Quiz): Regularly use short, focused quizzes to check comprehension of specific topics. These can be automatically graded, providing immediate feedback to students. *Example:* After each sub-topic, administer a short Moodle quiz testing key definitions and concepts.
- Online Assignments (Moodle Assignment): Assign tasks that require students to apply their knowledge, such as short essays, research summaries, or problem-solving exercises submitted digitally. *Example:* Ask students to research a specific application of a concept learned offline and submit a short report via Moodle Assignment.
- Offline Activities with Online Reflection (Blended): Engage students in hands-on activities, experiments, or group work offline, and then ask them to reflect on their learning process, challenges faced, and insights gained through an online journal or forum. *Example:* After a group presentation delivered offline, students individually reflect on their contribution and the team's effectiveness in a private Moodle journal.
- Peer Assessment (Online - Moodle Workshop/Assignment): Utilize Moodle's Workshop tool or assignment features to allow students to evaluate each other's work based on pre-defined criteria. This promotes critical thinking and provides diverse perspectives on learning. *Example:* Students submit drafts of a written assignment and then provide feedback to two peers using a rubric set up in Moodle Workshop.



4 : Maximising the Impact of the BuildingVids Materials

4.1 Encouraging Learner Engagement and Motivation

Sustaining learner interest and active participation is crucial for the effective use of the BuildingVids e-learning materials. We provide some strategies to foster engagement and motivation among students.

4.1.1 Relevance to the Real World

- **Connecting to Practice:** It is important to explicitly connect the architectural concepts and terminology learned through BuildingVids to real-world construction projects and case studies. Use examples from *local* architecture or current industry trends to demonstrate the relevance of the material.
- **Guest Speakers and Industry Insights:** Where possible, invite guest speakers from industry to share their experiences and highlight the importance of the specific terminology and processes covered in the videos.
- **Site Visits (virtual or real, if feasible):** Supplementing the learning with real or virtual tours of construction sites or architect's offices allows learners to see how the concepts they are learning are applied.

4.1.2 Flexible and Self-Paced Learning

This can be stressed as a positive thing. The BuildingVids materials are available online 24/7. This gives learners the ability to review or revisit the materials at their leisure and own learning paces. Furthermore, learners can be encouraged to explore related resources or investigate specific topics of interest, through external websites or further reading materials in the target language.

4.2 Adapting the Material to Different Learning Styles and Needs

We recognise that learners are diverse. The BuildingVids platform allows customisation to things like font size, background and screen resizing. We provide subtitles and transcripts to help various learners. Teachers are welcome to adapt the content and delivery to cater to different learning styles and needs as well.

4.3 Collaborative Learning

Working through a platform like Moodle allows for collaboration among a cohort of learners in one location or among different cohorts in different locations. In-built tools such as forums, wikis, group assignments and chat can foster interaction. This should be carefully planned by the teacher(s) to get maximum positive effect.

4.4 Monitoring Learner Progress and Providing Feedback

As in any aspect of learning, teachers should be able to see how well their students are doing with the BuildingVids materials and how they can help them learn even better.

4.4.1 Checking on Student Progress

The Moodle system can show teachers their learners' activity including which videos they have watched (and if they've finished them), what courses were read, what scores the students received on quizzes, etc. This helps teachers know if everyone is keeping up with the lessons.

4.4.2 Giving and Getting Feedback

Teachers can build feedback on the BuildingVids e-learning exercises by using the same questions in class, and just talking to learners. You will soon know if your learners are learning and thinking in the right way, and you can give personalised feedback. Of course, the converse is true, and teachers need to receive feedback from their learners too on the course materials, the methodologies used, the BuildingVids platform and content, and other things.

4.4.3 Improving and Goal Setting Together

Teachers can work with students to set goals or create opportunities for learning together. Why not try co-creating lessons together, and agreeing on objectives and outcomes that need to be achieved?

Key Considerations for Readability and Clarity:

- **Clear and Concise Language:** Avoid jargon where possible and explain any technical terms.
- **Logical Flow:** Ensure a smooth transition between topics and chapters.
- **Headings and Subheadings:** Use a clear hierarchy of headings to break up text and make it easy to scan.
- **Bullet Points and Numbered Lists:** Utilize these for presenting information concisely.
- **Visual Aids:** Incorporate plenty of self-explanatory, high-quality illustrations (screenshots, diagrams) to support the text.

- **Consistent Formatting:** Maintain a consistent font style, size, and layout throughout the handbook.
- **White Space:** Don't overcrowd pages with text; use white space to improve readability.
- **Index (Optional but Recommended for longer handbooks):** For quick referencing of specific topics.

List of Additional Resources

Archidict

<https://www.archidict.com/>